

HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN, JAMES D Check-in Date: 11/28/16 1823  
MR# A0000755396 Ord Diag: R19.8-OTH SYMPTOMS AND SIGNS INVOLVING THE DGSTV SYS AND ABDOMEN  
DOB: [REDACTED] 54Y Sex: M  
Acct #: A1632000004 Loc: 51A-5345-A  
ORD: BAIRD, CLINTON J Pt Type: INA  
ATT: SOUS, ZIAD  
REF: HANNA, B CASEY  
PCP: PHYSICIAN, UNKNOWN

Checkin-Exam Code Summary  
3120870-1125, 3120871-1045, A0-

CERVICAL SPINE, THREE IMAGES, 11/28/2016

CLINICAL INFORMATION: SURGERY, FUSION AND LAMINECTOMY.

COMPARISON: 11/16/2016.

FINDINGS:

TIME OF 0.2 MINUTE OF FLUOROSCOPY WAS USED, AND 3 FLUOROSCOPIC SPOT IMAGES ARE PROVIDED FOR REVIEW. IMAGES SHOW AN ENDOTRACHEAL TUBE AND A NASOGASTRIC TUBE AS WELL AS CERVICAL SPINE CORPECTOMY DEVICE WITH ANTERIOR FUSION HARDWARE, WHICH WAS SEEN PREVIOUSLY ON 11/16/2016. NOW, THERE ARE POSTERIOR FUSION RODS AND SCREWS ABOVE AND BELOW THE PREVIOUSLY PLACED ANTERIOR HARDWARE.

Transcriptionist- ELIZABETH ANN GUY, TRANSCRIPTIONIST

Reading Radiologist- MATTHEW K FORD, M.D.

Releasing Radiologist- MATTHEW K FORD, M.D.

Released Date Time- 11/29/16 1200

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Transcribed: 11/29/16 1200

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN,JAMES D Check-in Date: 11/26/16 1351  
MR# A0000755396 Ord Diag: Numbness/Tingling/Weakness  
DOB: [REDACTED] 54Y Sex: M  
Acct #: A1632000004 Loc: 40A-4315-A  
ORD: BAIRD,CLINTON J Pt Type: INA  
ATT: SOUS,ZIAD  
REF: HANNA,B CASEY  
PCP: PHYSICIAN,UNKNOWN

Checkin-Exam Code Summary  
3118782-5527

MRI C-SPINE WITHOUT AND WITH CONTRAST, 11/26/16

INDICATION: NUMBNESS/TINGLING/WEAKNESS.

TECHNIQUE: VARIOUS T1 AND T2-WEIGHTED SEQUENCES OBTAINED OF THE CERVICAL SPINE IN THE SAGITTAL AND AXIAL PLANES WITHOUT AND WITH IV CONTRAST.

COMPARISON: 11/15/16

THE PATIENT HAS UNDERGONE INTERVAL C5 AND C6 CORPECTOMY WITH PLACEMENT OF A METALLIC STRUT WHICH IS INTERPOSED BETWEEN C4 AND C7 VERTEBRAL BODIES. ALSO, THERE IS ANTERIOR PLATE AND SCREWS EXTENDING FROM C4 THROUGH C7 LEVEL. THERE IS A RIND OF EPIDURAL ENHANCEMENT SURROUNDING THE CORD AT THE OPERATIVE LEVEL EXTENDING FROM C4 INFERIORLY THROUGH C6 LEVEL. THIS COULD REPRESENT POSTOPERATIVE GRANULATION TISSUE BUT CANNOT EXCLUDE INFECTION. NO ENHANCEMENT OF THE CORD ITSELF IS OTHERWISE IDENTIFIED. THERE IS A REVERSAL OF THE CERVICAL LORDOSIS THROUGH THE OPERATIVE LEVEL WITH SOME DORSAL BUCKLING OF THE CORD. NO INTRINSIC SIGNAL ABNORMALITY OF THE CORD OTHERWISE IDENTIFIED.

IMPRESSION:

1. INTERVAL C5 AND C6 CORPECTOMY WITH PLACEMENT OF ANTERIOR FUSION HARDWARE FROM C4 THROUGH C7 LEVEL SINCE THE PRIOR STUDY FOR

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN,JAMES D Check-in Date: 11/26/16 1351  
MR# A0000755396 Ord Diag: Numbness/Tingling/Weakness  
DOB: [REDACTED] 54Y Sex: M  
Acct #: A1632000004 Loc: 40A-4315-A  
ORD: BAIRD,CLINTON J Pt Type: INA  
ATT: SOUS,ZIAD  
REF: HANNA,B CASEY  
PCP: PHYSICIAN,UNKNOWN

Checkin-Exam Code Summary  
3118782-5527

PREVIOUSLY-DESCRIBED EXTENSIVE DISCITIS/OSTEOMYELITIS AT C5-C6 LEVEL. THERE IS A RIND CIRCUMFERENTIAL EPIDURAL ENHANCEMENT AT THE OPERATIVE LEVEL EXTENDING FROM C4 THROUGH C6 LEVEL WHICH MAY REPRESENT ENHANCING GRANULATION TISSUE BUT CANNOT EXCLUDE INFECTION. NO DRAINABLE ABSCESS COLLECTION IDENTIFIED. THERE IS SOME DORSAL BUCKLING OF THE CORD THROUGH THIS REGION, BUT NO INTRINSIC CORD ENHANCEMENT OR SIGNAL ABNORMALITY OTHERWISE IDENTIFIED.

Transcriptionist- DAVID POGUE, TRANSCRIPTIONIST  
Reading Radiologist- STUART K STRICKLAND, M.D.  
Releasing Radiologist- STUART K STRICKLAND, M.D.  
Released Date Time- 11/27/16 0609

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN,JAMES D Check-in Date: 11/23/16 1450  
MR# A0000755396 Ord Diag: Numbness/Tingling  
DOB: [REDACTED] 54Y Sex: M  
Acct #: A1632000004 Loc: 40A-4315-A  
ORD: LEHR,PHILIP J Pt Type: INA  
ATT: SOUS,ZIAD  
REF: HANNA,B CASEY  
PCP: PHYSICIAN,UNKNOWN

Checkin-Exam Code Summary  
3117656-3009

NONCONTRAST CT CERVICAL SPINE, 11/23/2016

COMPARISON: 11/17/2016

HISTORY: NUMBNESS, TINGLING, WEAKNESS AFTER RECENT MVA

TECHNIQUE: HELICAL CT SCANNING ACQUIRED OF THE CERVICAL SPINE WITHOUT IV CONTRAST. TWO DIMENSIONAL RECONSTRUCTIONS IN THE CORONAL AND SAGITTAL PLANES.

DOSE REDUCTION TECHNIQUES WERE UTILIZED.

CERVICAL ALIGNMENT REMAINS SATISFACTORY IN THIS PATIENT STATUS POST ACDF FROM C4 THROUGH C7 WITH SURGICAL CORPECTOMY AT THE C5 AND C6 LEVELS. SURGICAL HARDWARE IS INTACT AND UNCHANGED IN POSITION FROM PRIOR STUDY. NO RETRACTION OF SURGICAL PLATE. THE INTERBODY GRAFT REMAINS WELL POSITIONED AT C5-C6 WITH MINERALIZING OF BONE SEEN WITHIN THE STRUT ITSELF. THE POSTERIOR ELEMENTS ARE INTACT AND WELL ALIGNED WITHOUT FACET FRACTURE/DISLOCATION. SEVERE FACET ARTHROPATHY SEEN AT MID-CERVICAL LEVELS. RELATIONSHIPS ABOUT THE SKULL BASE AND DENS ARE WELL MAINTAINED. NO PREVERTEBRAL SOFT TISSUE SWELLING SEEN.

AXIAL IMAGING CONFIRMS THE ABOVE. SEVERE FACET HYPERTROPHY AND ANKYLOSIS SEEN AT MID-CERVICAL LEVELS.

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN,JAMES D Check-in Date: 11/23/16 1450  
MR# A0000755396 Ord Diag: Numbness/Tingling  
DOB: [REDACTED] 54Y Sex: M  
Acct #: A1632000004 Loc: 40A-4315-A  
ORD: LEHR,PHILIP J Pt Type: INA  
ATT: SOUS,ZIAD  
REF: HANNA,B CASEY  
PCP: PHYSICIAN,UNKNOWN

Checkin-Exam Code Summary  
3117656-3009

IMPRESSION:

1. POST-SURGICAL CHANGES, MID-CERVICAL SPINE. CERVICAL HARDWARE IS INTACT AND UNCHANGED IN POSITION FROM PRIOR STUDY. NO CERVICAL SPINAL FRACTURING IS SEEN.

Transcriptionist- MARY KIN, TRANSCRIPTIONIST  
Reading Radiologist- GEORGE J CARSTENS MD, M.D.  
Releasing Radiologist- GEORGE J CARSTENS MD, M.D.  
Released Date Time- 11/25/16 0847

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN, JAMES D Check-in Date: 11/17/16 0239

MR#: A0000755396 Ord Diag: Weakness

[REDACTED] 54Y Sex: M

Acct #: A1632000004

Loc: 40A-4435-A

ORD: LEHR, PHILIP J

Pt Type: INA

ATT: SOUS, ZIAD

REF: HANNA, B CASEY

PCP: PHYSICIAN, UNKNOWN

Checkin-Exam Code Summary

3111023-3009

NONCONTRAST CT CERVICAL SPINE, 11/17/2016

HISTORY: WEAKNESS; HARDWARE PLACEMENT.

TECHNIQUE: HELICAL CT SCANNING ACQUIRED OF THE CERVICAL SPINE WITHOUT IV CONTRAST. TWO-DIMENSIONAL RECONSTRUCTIONS IN THE CORONAL AND SAGITTAL PLANES. DOSE REDUCTION TECHNIQUES WERE UTILIZED.

COMPARISONS: 11/14/2016.

REPORT:

CERVICAL ALIGNMENT IS SATISFACTORY IN THIS PATIENT STATUS POST ACDF FROM C4 THROUGH C7, WITH CORPECTOMY AT C5 AND C6. THE METALLIC STRUT GRAFT IS WELL POSITIONED FROM C4 THROUGH C7, WITH MORSELIZED BONE GRAFTING MATERIAL SEEN WITHIN THE STRUT ITSELF. NO SIGNIFICANT ANGULATION OR DISPLACEMENT OF THE STRUT GRAFT NOTED. THE POSTERIOR ELEMENTS ARE INTACT AND WELL ALIGNED, WITHOUT FACET FRACTURE/ DISLOCATION. SOME POSTERIOR DISK SPACE LOSS AND ANTERIOR SPURRING ARE SEEN AT C7-T1. ADDITIONAL DEGENERATIVE ENDPLATE CHANGES SEEN AT UPPER THORACIC LEVELS.

MODERATELY SEVERE FACET ARTHROPATHY IS SEEN BILATERALLY AT ALL MID CERVICAL LEVELS. RELATIONSHIPS ABOUT THE SKULL BASE AND DENS ARE WELL MAINTAINED.

FINAL DUPLICATE

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN, JAMES D Check-in Date: 11/17/16 0239

MR#: A0000755396 Ord Diag: Weakness

[REDACTED] 54Y Sex: M

Acct #: A1632000004

ORD: LEHR, PHILIP J

ATT: SOUS, ZIAD

REF: HANNA, B CASEY

PCP: PHYSICIAN, UNKNOWN

Loc: 40A-4435-A

Pt Type: INA

Checkin-Exam Code Summary

3111023-3009

**IMPRESSIONS:**

1. POSTSURGICAL CHANGES, C4 THROUGH C7. SURGICAL HARDWARE IN SATISFACTORY POSITION.

Transcriptionist- ELIZABETH ANN GUY, TRANSCRIPTIONIST

Reading Radiologist- GEORGE J CARSTENS MD, M.D.

Releasing Radiologist- GEORGE J CARSTENS MD, M.D.

Released Date Time- 11/17/16 0841

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FINAL DUPLICATE

Transcribed: 11/17/16 0841

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HILLCREST MEDICAL CENTER  
1120 S. UTICA, TULSA, OK. 74104-4090  
MEDICAL IMAGING REPORT

Patient: BUCHANAN,JAMES D Check-in Date: 11/16/16 1233  
MR# A0000755396 Ord Diag: R19.8-OTH SYMPTOMS AND SIGNS INVOLVING THE DGSTV SYS AND ABDOMEN  
DOB: [REDACTED] 54Y Sex: M  
Acct #: A1632000004 Loc: 40A-4435-A  
ORD: BAIRD,CLINTON J Pt Type: INA  
ATT: SOUS,ZIAD  
REF: HANNA,B CASEY  
PCP: PHYSICIAN,UNKNOWN

Checkin-Exam Code Summary  
3110981-1126,3110982-1045,A0-

CERVICAL SPINE, TWO VIEWS, 11/16/2016

INDICATION: SURGERY FILMS FOR SURGICAL CORRECTION OF OSTEOMYELITIS AND DISKITIS AT C5-C6.

REPORT:

TWO FLUOROSCOPIC IMAGES WERE ACQUIRED OF THE CERVICAL SPINE IN THE OPERATING ROOM. FLUORO TIME IS 6.3 SECONDS. THE PATIENT HAS UNDERGONE CORPECTOMY/REMOVAL OF THE C5 AND C6 VERTEBRAL BODIES. SURGICAL SCREWS SECURE HARDWARE INTO THE C4 AND C7 VERTEBRAL BODIES WITH A VERTEBRAL BODY SPACER/PROSTHETIC DEVICE SEEN ACROSS THE C5-C6 LEVELS. SOFT TISSUE SWELLING SEEN ON THE PREVERTEBRAL SOFT TISSUES FROM THE CELLULITIS LOCATED HERE. ET TUBE IS NOTED ON THE FILMS. SURGERY WAS TO CORRECT/REMOVE THE INFECTED AREAS IN THE CERVICAL SPINE.

CONCLUSION:

1. LIMITED INTRAOPERATIVE VIEWS OF THE CERVICAL SPINE AS DESCRIBED ABOVE.

Transcriptionist- KARLA L JACOBS, TRANSCRIPTIONIST  
Reading Radiologist- JASON D MARTENS, M.D.  
Releasing Radiologist- JASON D MARTENS, M.D.  
Released Date Time- 11/16/16 1652

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Transcribed:11/16/16 1652

Hillcrest Medical Center

1120 South Utica

Tulsa, OK 74104

Patient : JAMES D BUCHANAN

MRN: 755396A

Admit: 11/15/2016

Physician: Clinton Baird MD

Date of Birth: [REDACTED]

Account #: 1632000004A

Service Date: 11/15/2016

Location: 6TA

Discharge:

OPERATIVE NOTE

TITLE OF OPERATION:

1. C5 and C6 anterior cervical corpectomy.
2. C4-C5, C5-C6 and C6-C7 discectomy.
3. C4 through C7 anterior expandable cage reconstruction of corpectomy site.
4. C4 through C7 anterior cervical plating.

PREOPERATIVE DIAGNOSES:

1. Quadriplegia.
2. Cervical epidural abscess.

POSTOPERATIVE DIAGNOSES:

1. Quadriplegia.
2. Cervical epidural abscess.

SURGICAL ASSISTANT: Phillip Lehr ARNP. The surgical assistant assisted with all aspects of the operative intervention.

SURGICAL IMPLANTS: Urlich medical expandable titanium cage, Altus Spine anterior cervical plate and screws, ViaGraft demineralized bone matrix putty.

OPERATIVE INDICATIONS: The patient is a 54-year-old gentleman who had a very complicated history, which can be further elucidated in the admission history and physical. Briefly, he was involved in being struck by a car while riding bicycle several weeks ago. He was hospitalized over the course of about 2 weeks in the Intensive Care Unit with critical illness. He was thereafter discharged. He ended up finding himself in jail and it was during this time in jail that he had very significant clinical deterioration in his neurologic status. Retrospectively, it is obvious that he likely developed the beginnings of cervical epidural abscess infection in result of his critical illness in hospitalization, but then while in jail, he deteriorated significantly and his clinical deterioration went unrecognized and untreated until he was nearly completely quadriplegic. He presented to Hillcrest Medical Center and was taken to the operating room for the above-mentioned operative intervention. I discussed with them. He understood the risks, benefits and indications and gave verbal recognition of concern because he was not able to sign.

OPERATIVE NARRATIVE: The patient was taken to the operating room where general endotracheal anesthesia was administered. He was intubated with a GlideScope. His neck was left in neutral position. He was positioned supine on the operative table and he was marked out with a left transverse neck incision. The area was prepped with DuraPrep and allowed to dry. Timeout was performed. He was given preoperative antibiotics. He was draped in routine sterile fashion and incision had been infiltrated with 0.25% Marcaine with epinephrine and was incised with #10 skin blade. Bovie cautery was used to dissect down to the subcutaneous tissues and sharp and blunt dissection was used to dissect down the anterior cervical spine.

THIS IS AN UNSIGNED DRAFT REPORT ONLY. IT HAS NOT BEEN REVIEWED FOR ACCURACY BY THE AUTHOR. TO VIEW THE FINAL VERSION, PLEASE LOG INTO HORIZON PHYSICIAN PORTAL AND VIEW THE DOCUMENT VIA THE MEDICAL RECORDS TAB.

Hillcrest Medical Center

1120 South Utica

Tulsa, OK 74104

Patient : JAMES D BUCHANAN

Date of Birth: [REDACTED]

MRN: 755396A

Account #: 1632000004A

Admit: 11/15/2016

Discharge:

Service Date: 11/15/2016

Physician: Clinton Baird MD

Location: 6TA

OPERATIVE NOTE

There was a significant amount of phlegmon anteriorly within the cervical spine. The longus colli muscles were thickened and made the dissection more difficult. Ultimately, the trimline retractors were placed. The corpectomy was completed with a high-speed drill, pituitary rongeur and #3 and #4 Kerrison punch at the C5-C6. The discectomy was completed at C4, C5 and C6. There was significant amount of phlegmon posteriorly as well that elevated out of the epidural space with the smallest curved curette and #2 Kerrison punch, removing the posterior longitudinal ligament entirely and exposing the thecal sac off \_\_\_\_\_ C4 and C5. The 14 mm diameter x 24-39 mm expandable Ulrich cage was selected and packed with ViaGraft. This was placed in position and slightly expanded to create tension across the C4 through C7 levels. The anterior cervical plate from Altus Spine was placed over the C4 through C7 levels. Variable angle screws of 14 mm in length and 3.5 mm diameter were placed at C4 and C7. The locking mechanism was locked. A 10-French drain was brought out through a separate stab incision inferiorly in a subfascial location. The muscle and fascia was closed with interrupted #1 Vicryl, the subcuticular fat layer with interrupted 2-0 Vicryl and subcuticular layer with interrupted 3-0 Vicryl. The estimated blood loss was 100 mL. There were no complications noted. The motor evoked potentials actually did improve during the operative intervention. The reading neurologist was John Hastings, M.D.

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Clinton Baird MD

D:12/01/2016 11:21:00

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Job #: 086375

Doc. ID: 5580937